Instruction Manual

CS-100 Series

Contents page

Overview

Thank you for purchasing CS-100 conference system from Monacor.

CS-100 is the easiest digital conference system with superb performance and elegant design which can be used in various conference rooms.

CS-100 main control unit has the latest built-in digital module which can control up to 10 chairman units and 128 delegate units. What's more, the built-in pre-mixer and amplifier can definitely meet your requirements for any occasion.

The main control unit runs auto-detection to check if all the units work properly when turning on, facilitating timely system detection.

High reliability is our utmost purpose when developing CS-100 conference system. Each main control unit and its fittings have all gone through careful assembly and strict test in our ISO 9001 approved factory. The excellent performance, high reliability and reasonable price make it the indispensable conference system for you.

System Features

Main Control Unit

1. Auto-detect connection

2. Digital control capability: 10 chairman units and 128 delegate units

3. Several LED indicators and conference mode setting buttons

4. Built-in pre-mixer

5. Built-in amplifier

Chairman Unit

1. Types: Tabletop and flush-mounted

2. Microphone on/off button, control button

3. Pliable in anywhere within circuit

4. A maximum of 10 units can be installed

5. ID code setting: 7-bit DIP switch
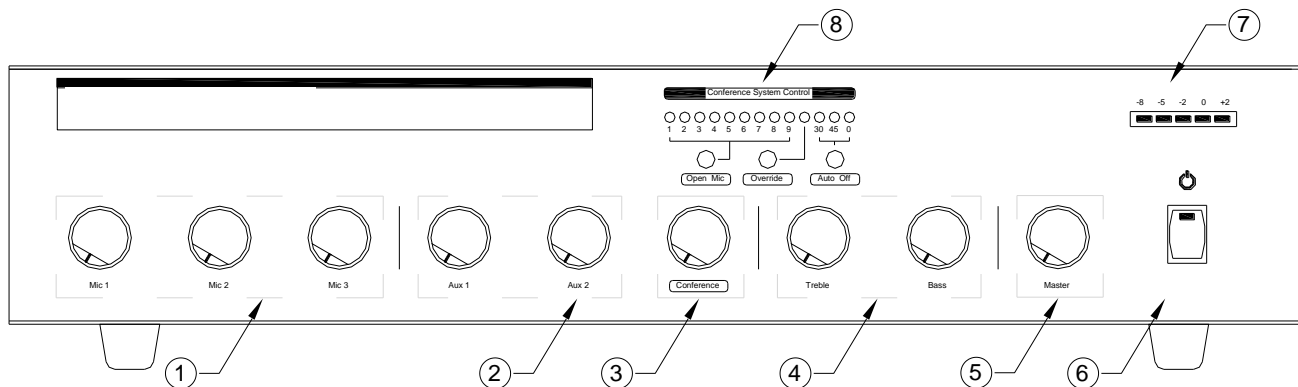
Delegate Unit

1. Types: Tabletop, flush-mounted and hand-held

2. Microphone on/off button

3. A maximum of 128 units can be installed

4. ID code setting: 7-bit DIP switch

Safety Instructions

1. Please read and observe these instructions before installing and using the apparatus.

2. Use only accessories specified by the manufacturer. The manufacturer is not liable for damage caused by the use of non-specified accessories.

3. Install the apparatus and its accessories carefully. Strike and fierce shaking may damage the apparatus.

4. Make sure the power cord is fixed properly.

5. Do not overload wall outlets and extension cords as this can result in a risk of fire or short circuit.

6. To reduce the risk of damage from lightning strikes, it is important that all electric cables should be bonded to the same grounding point.

7. Do not block any ventilation openings to prevent overheating and malfunction.

8. Do not expose the apparatus to rain or moisture.
    Humidity may lead inside components to damage. Appropriate shelter is necessary when placing it outside (Best working environment: Temperature 0°C ~ 40°C <32°F ~ 104°F>, humidity below 90%).

9. Please do not switch on and off the apparatus rapidly.
    Rapid switch on and off the apparatus should be avoided all the time to prevent inside sensitive electronic circuits from being damaged by surges.

10. Do not clean the apparatus and its accessories with chemical solvents. Use only a clean, dry/dampish cloth.

11. Refer to maintenance technician when the apparatus has been damaged in any way, such as:
    A• power-supply cord or plug is damaged
    B• liquid has been spilled in
    C• has been exposed to rain or moisture
    D• has been dropped
    E• objects have fallen into the apparatus
    F• does not operate normally

12. Note: When the printed circuit board is going through electric static treatment, correct ESD safety precaution and grounding should be assured.

13. Note: Before connecting the apparatus to main AC, please select the supply voltage in accordance with the wall voltage in your country to prevent damage. Refer to Installation and Setting (Page 8) for selecting.

14. Warning: Do not disassemble or remodel the product, as these actions may lead to electrical shock or damage. The guarantee on the product will become null if the product is ever disassembled.

CS-100 Series

Front Panel Description

1. Mic 1~3 Volume Control

2. Aux 1 Volume Control – for external input sound and Chairman Mode beep

   Aux 2 Volume Control – for external input sound

3. Conference Volume Control – for conference microphone output

4. Treble Control and Bass Control

5. Master Volume Control – for entire system

6. Power Switch

7. Output Level Indicator LED

8. Control Mode Indicator LED

   Open Mic – Open microphone number setting (from 1 to 9 microphones)

         All LEDs are on (1~9) shows the entire system is opened (unrestricted)

         All LEDs are off shows Chairman Mode. All delegate microphones cannot talk
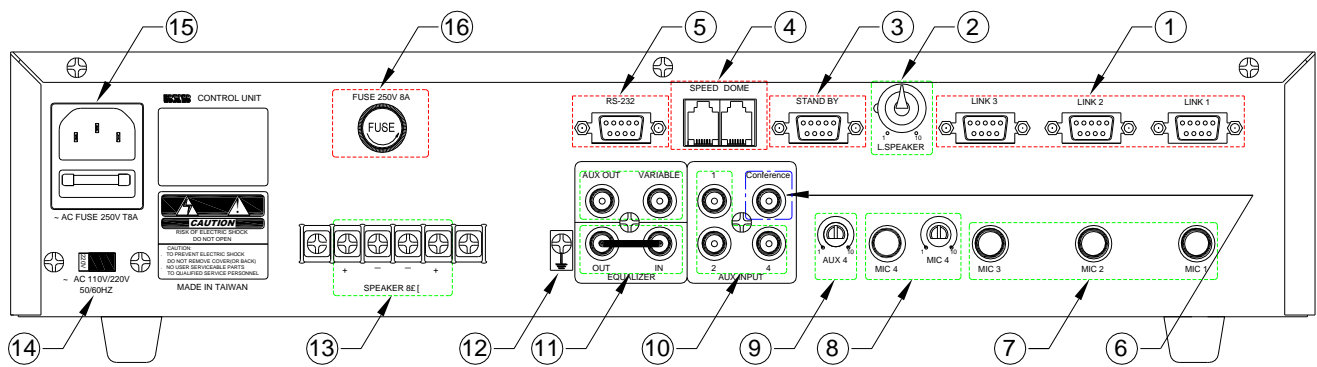
   Override – press for Override Mode

   Auto Off – microphone auto-cutoff duration

       30/45: If there's no sound input for 30 or 45 seconds, delegate microphones will
           be turned off automatically.

       0: Deactivate this function.

Rear Panel Description

1. Link 1~3 – Conference unit connectors

2. L.Speaker Volume Control – for conference unit internal loudspeaker
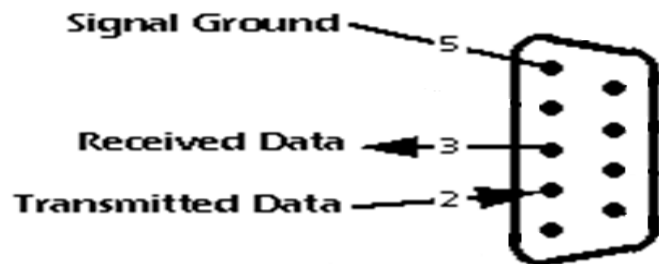
3. Standby Conference Unit Connector (Invalid)

4. Speed Dome RS-485 Ports（RJ-11）(Invalid)

5. RS-232 Port (Invalid)

   2nd foot: Transmitted Data (Tx)

   3rd foot: Received Data (Rx)

   5th foot: Signal Ground(G)

6. Conference Unit Internal Loudspeaker Input

7. Mic 1~3 – dynamic microphone input（6.3Ø）

8. Mic 4 – dynamic microphone input（6.3Ø）and volume control knob

9. Aux 4 Volume Control – for external input sound

10. Aux Input Terminals

11. Conference microphone sound output and external sound processor terminals
    Aux out – sound output, volume is not controlled by Master Volume Control

    Variable – sound output, volume is controlled by Master Volume Control

    Equalizer – external sound processor terminals, connect to timbre facilities such as external
    equalizer and dynamic expander. The factory set in/out a short circuit direct output.

12. Earth Ground Connection Screw

13. SPEAKER 8Ω – internal 40W×2 amplifier and low resistance 8Ω speaker signal output terminal

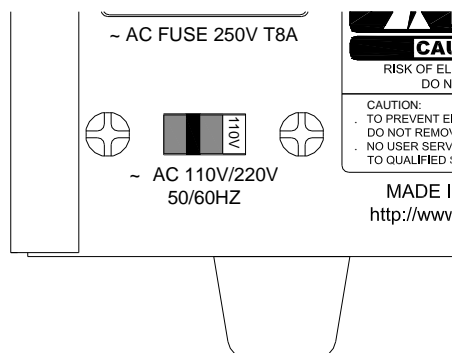14. Supply Voltage (AC 110V/220V, 50/60HZ) Selector Switch

15. IEC Socket – Used for A/C Line Interconnect with AC fuse（standby fuse: AC 8A）
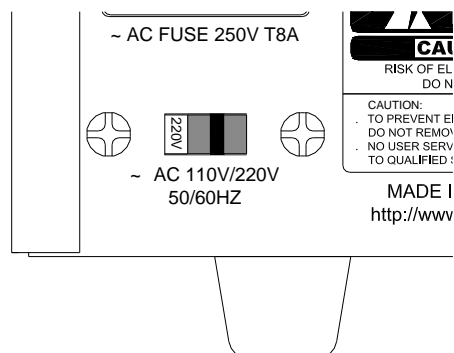
16. DC fuse（DC 8A）

1. General installation

1.1 Select supply voltage
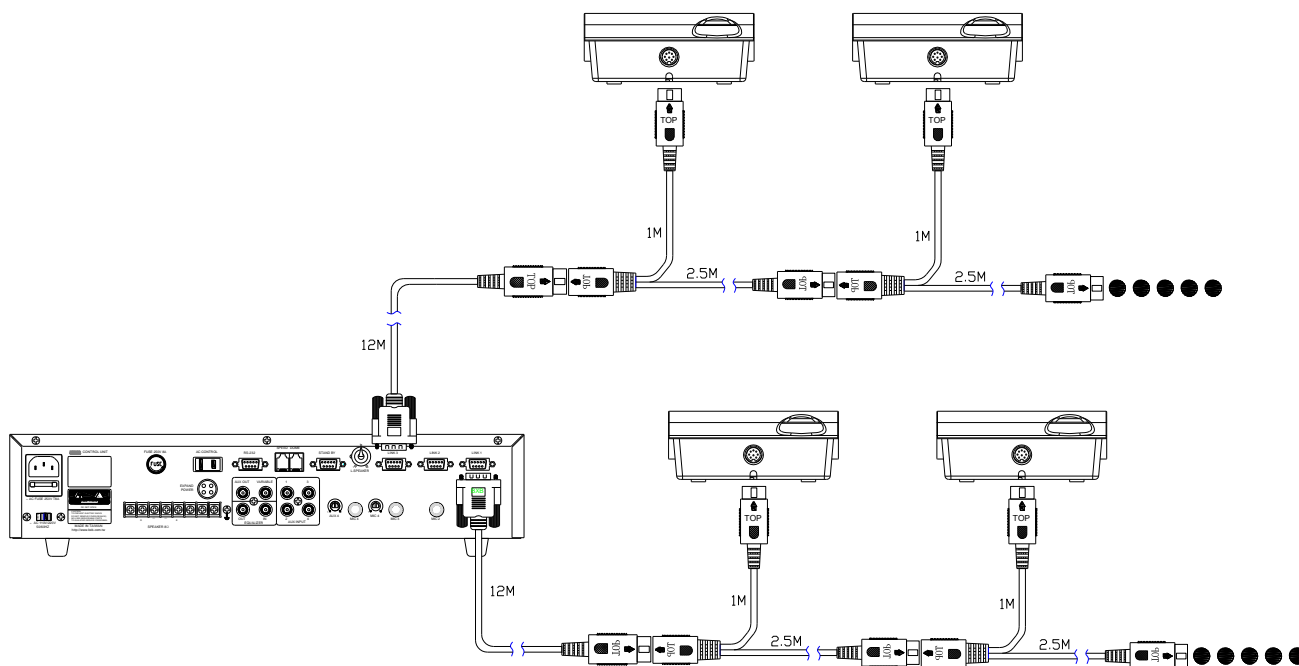

AC 110V/60Hz   AC 220V/50Hz

The supply transformer has been designed for use either 110V or 220V, 50/60Hz, selected by a slide switch on the rear panel. Please make sure you select the correct supply voltage before turning on the apparatus; otherwise it may cause serious damage.

1.2 Connections between main control unit and chairman/delegate units

1.2.1 There are three links on the rear panel; they can be connected in random orders.

1.2.2 Chairman/delegate unit is equipped with a hidden connecting terminal. When connecting, you can hide wiring with Y-shaped cable and neaten the conference room.

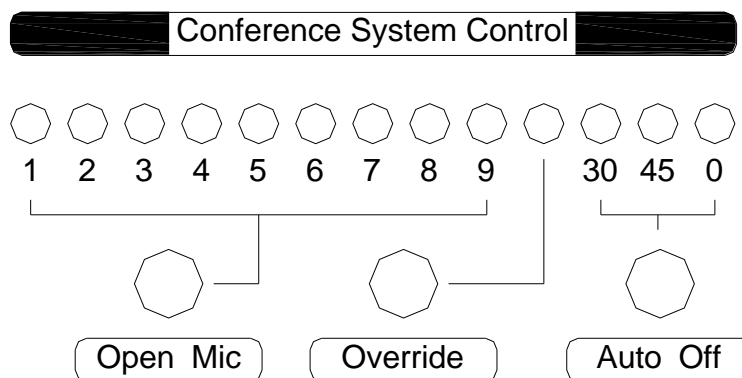1.2.3 Chairman unit can be placed anywhere in the circuit.

1.2.4 When disconnecting any conference unit, please turn off the apparatus first.

2. Quick Start

2.1 After making sure all the above steps are done, plug in AC power supply and turn on power switch. The LED on front panel will show the previous conference setting.

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┌──────────────────────────────────────────────┐
│ ▓▓▓▓▓▓▓  Conference System Control  ▓▓▓▓▓▓▓ │
└──────────────────────────────────────────────┘

      ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯   ◯ ◯ ◯
      1 2 3 4 5 6 7 8 9    30 45 0
      └────────┬───────────┘   └──┬──┘
           ◯          ◯            ◯
      ( Open  Mic )  ( Override )  ( Auto  Off )
```
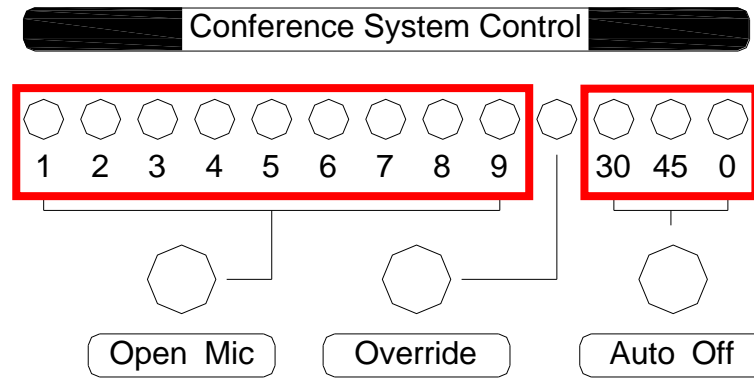
2.2 When turning on the conference system, it will start auto-scanning if all the units work properly. The light ring on normal microphone will turn on. Conversely, flashing light ring shows false connection.

2.3 To check the connection, turn off the apparatus before disconnecting any units. Turn on the power switch again when finish checking.

2.4 Press any button on chairman/delegate unit to cancel light ring or wait for 30 seconds (it will auto-off) and start the conference.

3. LED display and operation

3.1 Open Mic

3.1.1　1~9：Press "Open Mic" button to open 1~9 delegate microphones.

3.1.2　Open system：When 1~9 LED all light up shows the whole system is opened. All the delegate microphones can talk.

3.1.3　Chairman mode：1~9 LED are all off. Only chairman microphone can talk.

3.2 Override

3.2.1　Override mode：One overrides another. For instance, if you open one microphone, it means only one delegate microphone can talk at a time. When one is talking, while the second conference microphone is turned on, the previous talking microphone will be switched off automatically. If you open three microphones, it means starting the fourth microphone will disable the first one. Starting of the fifth will disable the second. Chairman microphone is not restricted in any modes.
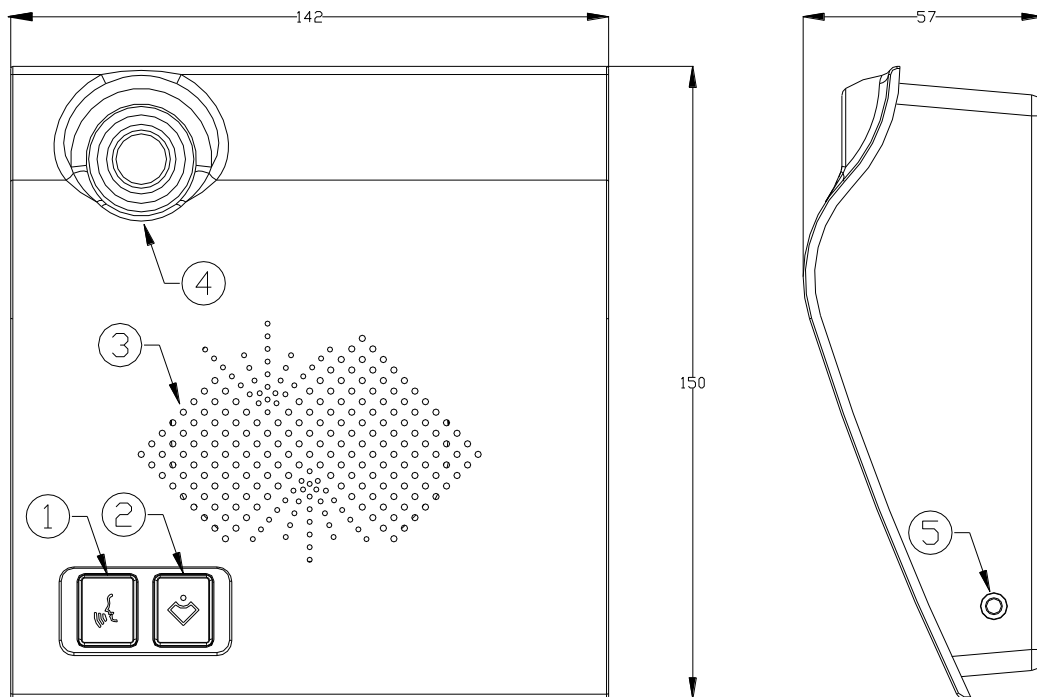
3.3 Auto Off（Voice control）

3.3.1 Voice control：When delegate microphone receives no sound signal in 30/45 seconds, microphone will auto-cutoff. Chairman microphone is not applied.

3.3.2 Select time

　　30：Delegate microphone will auto-cutoff if it receives no sound signal in 30 seconds.

　　45：Delegate microphone will auto-cutoff if it receives no sound signal in 45 seconds.
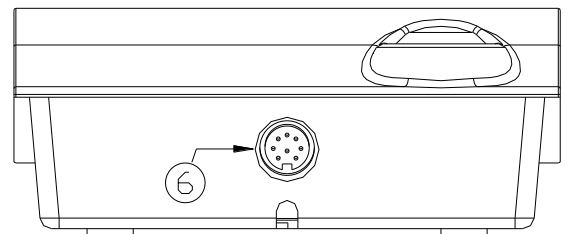
　　0：Deactivate the function.

3.4 Auto Save Settings

3.4.1 The main control unit saves above settings automatically. Even turning off the apparatus or confronting power cut wouldn't erase its memory.

Microphone Description

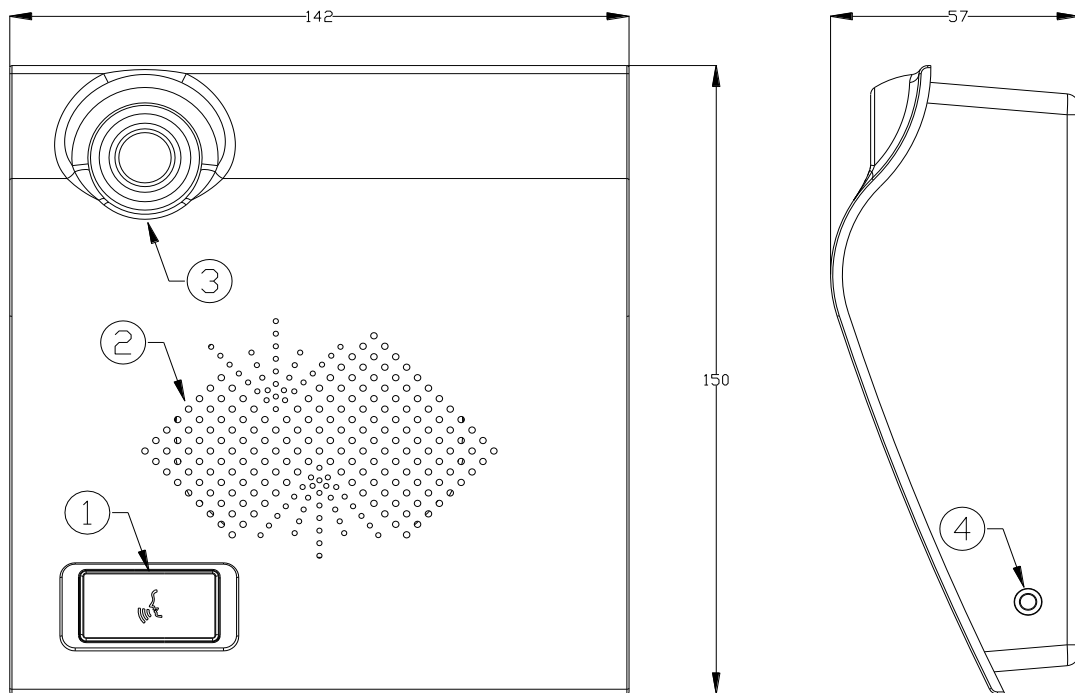## Tabletop Chairman Unit – CS-100CU

◯,1 → Talk button（with backlight indication）

◯,2 → Chairman Control Button（with backlight indication）

◯,3 → Build-in speaker for decentralized sound

◯,4 → Built-in socket for DIN type microphone

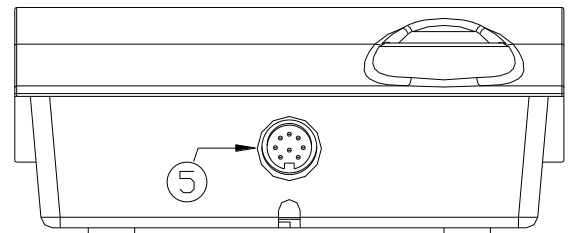◯,5 → Recorder output plug

◯,6 → Built-in socket for connection cable

Operation：

1. Press "Talk" button to turn on microphone. Both the button and the light ring on microphone will light up.

2. When turn on the microphone, build-in speaker on the unit will be silent to prevent echo.

3. Press "Control" button to turn off all delegate microphones. Delegate can press "Talk" button again to continue talking.

4. DIN type microphone and the base can be separated. It is not only easy to install and maintain for fixed areas, but also easy to transport and store for mobile areas.

5. Single Y-shaped connection cable and the built-in socket make the conference area tidy and neat.

Tabletop Delegate Unit – CS-100DU

◯,1 → Talk button（with backlight indication）

◯,2 → Build-in speaker for decentralized sound

◯,3 → Built-in socket for DIN type microphone

◯,4 → Recorder output plug

◯,5 → Built-in socket for connection cable

Operation：

1. Press "Talk" button to turn on microphone. Both the button and the light ring on microphone will light up.

2. When turn on the microphone, build-in speaker on the unit will be silent to prevent echo.

3. DIN type microphone and the base can be separated. It is not only easy to install and maintain in fixed areas, but also easy to transport and store in mobile areas.

4. Single Y-shaped connection cable and the built-in socket make the conference area tidy and neat.

CS-100 Main Control Unit Technical Specifications

TECHNICAL DATA

◎Frequency response：100HZ~16KHZ

◎LINE IN：-4dB~+6dB≧10KΩ（balanced）

◎LINE OUT：-4dB~+12dB≧200Ω（balanced）

◎Sensitivity：-60dB

◎Total Harmonic distortion：≦0.5%

◎S/N：90dB

◎Conference microphone connection：D type express port x 3 sets

◎Mixer

 Mic input：4 sets 600Ω/6mV/-22dB

 Line input：4 sets 20KΩ/300mV/-10dB

◎Power amplifier：40W(8Ω)×2

◎5 LED level display

◎Power：AC110/220，50/60Hz，Power LED light

PHYSICAL DATA

◎Dimension and weight

 Height： 100（mm）

 Wide： 430（mm）

 Depth： 230（mm）

 Weight：10（KG）

 Accessory：19" brackets are included

 Surface：Black, against rusty paint

Microphone Unit Technical Specifications

◎Type: Heart type capacitance

◎Frequency response: 100 Hz~ 16 KHz

◎Sensitivity: -23 dBv/PaMax.

◎Sound Voltage: 126 dB (3% THD)

◎S/N ratio: >20 dB (1 kHz)

◎Dimensions: 66 mm (2.5inch)

◎Frequency response: 120 Hz - 16 kHz

◎Rated input: 0.5W RMS

◎Voltage: DC12~18V

◎Connections: DIN8 － DIN8（Y Type）

◎Earphone/REC plug:3.5Ø，stereo

Appearance:

◎Base dimensions: 140 x 48 x 150mm (W x H x D)

◎Mounting: Table-top

◎Microphone length: 48 cm (length)

◎Net Weight: 0.82kg (Including Mic)